

Contributions to the study of Asiatic Lasiocampidae.

5. Descriptions of new species of *Euthrix* MEIGEN, 1830 and of related genera, with a synonymic note

(Lepidoptera, Lasiocampidae)

by

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received 24.VIII.2001

Abstract: This article deals with descriptions of 6 new species and 5 new subspecies of Asiatic Lasiocampidae as follows:

Euthrix vulpes spec. nov. from India and Nepal; *Euthrix sherpai* spec. nov. from Thailand and Laos; *Euthrix lao* spec. nov. from Laos; *Euthrix fossa mariae* subspec. nov. from Thailand; *Euthrix orboy occasialis* subspec. nov. from Taiwan; *Euthrix imitatrix sabon* subspec. nov. from Burma; *Euthrix imitatrix thrix* subspec. nov. from China; *Lenodora oculata* spec. nov. *Cosmotriche discitincta szini* subspec. nov. from Nepal; *Somadasyss saturatus* spec. nov. from China; *Syrastrenopsis imperiatus* spec. nov. from China. The holotypes of new taxa are deposited as pointed out in the text in the collections of BMNH and MWM.

Additional information on *Syrastrenopsis inthanonensis* ORHANT, 2001 is given. The new synonymy as follows is proposed: *Orientrix* TSHISTIAKOV, 1998 is a junior objective synonym of *Routlegdia* TUTT, 1902 (as a subgenus within *Euthrix* MEIGEN, 1830), syn. nov.

Zusammenfassung: In diesem Artikel werden 6 Arten und 5 Unterarten von *Euthrix* MEIGEN, 1830, *Lenodora* MOORE, [1883] 1882–1883, *Cosmotriche* HÜBNER, [1820] 1816, *Somadasyss* GAEDE, 1932 und *Syrastrenopsis* GRÜNBERG, 1914 neu beschrieben (siehe Liste der neuen Taxa im Summary oben). Die vor kurzem aus Thailand beschriebene *Syrastrenopsis inthanonensis* ORHANT, 2001 wird näher betrachtet. Folgende neue Synonymie wird festgestellt: *Routlegdia* TUTT, 1902, = *Orientrix* TSHISTIAKOV, 1998, syn. nov.

This article deals with descriptions of 6 new species and 5 new subspecies of Asiatic Lasiocampidae of the *Euthrix* MEIGEN-generic group.

The institutions of deposition for the holotypes of new taxa are pointed out in the text and the following abbreviations are used for museums where the collected material is deposited:

- BMNH – The Natural History Museum, formerly British Museum (Natural History), London, Great Britain;
- CAHU – collection of ARMIN HAUENSTEIN, Untermünkheim, Germany;
- CMSW – collection of MANFRED STRÖHLE, Weiden, Germany;
- MWM – Entomologisches Museum Thomas J. WITT, Munich, Germany;
- ZFMK – Zoologisches Forschungsinstitut und Museum Alexander Koenig, Bonn, Germany.

Euthrix vulpes spec. nov.
(colour plate XXII, figs 1, 2)

Holotype ♂: Sikkim, Mt. Kanchenjunga SE, 27°30'N, 82°20'E, 11.–14.VIII.1995, 2225 m, leg. E. AFONIN & V. SINJAEV (MWM).

Paratypes: 7 ♂♂, Sikkim, Mt. Kanchenjunga Himal., 27°30'N, 88°20'E, 7.–8.VIII.1995, 3000 m, leg. E. AFONIN & V. SINJAEV (MWM); 1 ♂, Indien, W.B., Darjeeling Minjitar, 650 m, 19.–21.VII.1989, leg. W. THOMAS (GU 3888 – MWM); 1 ♂, Indien, WB Darjeeling, Tigerhill, 2400 m, 29.–31.VIII.1988, leg. W. THOMAS (MWM); 2 ♂♂, 1 ♀, Darjeeling, Tiger Hill, Darjeeling Town, 8.–15.VII.1994 (MWM); 1 ♂, 1 ♀, NW India, Darjeeling, 1989, leg. W. THOMAS (MWM); 2 ♂♂, Sikkim, 2600 m, Mt. Kanchenjunga SE, 27°30'N, 88°20'E, 9.–10.VIII.1995, leg. E. AFONIN & V. SINJAEV (MWM); 1 ♀, the same data, 11.–14.VIII.1995, 2225 m, leg. E. AFONIN & V. SINJAEV (MWM); 5 ♂♂, 8 ♀♀, India, West Bengal, Darjeeling, 15.–30.VI.1989–1990, leg. SUBRAT TAMANG & W. THOMAS (CAHU); 5 ♂♂, Nepal, Ganesh Himal, 16 km S from Somadang, 2500 m, 85°12'E, 28°10'N, leg. HREBLAY & CSOVARI (MWM); male, Nepal, 6 km NNE of Muldi (Murre), 2835 m, 85°58'E, 27°23'N, leg. M. HREBLAY & T. CSOVARI (GU 4399 – MWM); 1 ♂, Annapurna Himal, Poon Hill, 2700 m, 13.–15.VII.1998, leg. V. SINJAEV & E. AFONIN (GU 6480 – MWM); 1 ♂, Nepal, Annapurna Himal, Banthanti village, 2500 m, 83°43'E, 28°22.5'N, 25.VII.1995, leg. Gy. M. LÁSZLÓ & G. RONKAY (GU 4129 – MWM); 1 ♂, Nepal, Lapchi Kang Range, 4 km NE of Chilangka (Tham Dada), 2600 m, 86°09'E, 27°45'N, 10.IX.1995, leg. CHENGA SHERPA (GU 5115 – MWM); 5 ♂♂, East Nepal, Milke Danda, Nesum, 1500 m, 21.VIII.2000, leg. CSÖVARY & HREBLAY (MWM); 6 ♂♂, 1 ♀, East Nepal, Deorale Danda, 6 km NW of Yamphudin, 2000 m, 8.VIII.2000, leg. CSÖVARY & HREBLAY (MWM); 1 ♂, 1 ♀, East Nepal, Tinjure Danda, Tinjure Phedi, 2650 m, 24.VIII.2000, leg. CSÖVARY & HREBLAY (MWM).

Male: Expanse 34–41 mm, forewing length 18.5–21 mm. Forewings with rounded external margin, of ochreous-brown ground colour; outer field densely covered with silver-rose shining scales; antemedial fascia curved, dark grey, pointed inside by silver scales; postmedial fascia dark grey, diagonal, slightly curved in M-zone, distinctly pointed outside by silver scales; external fascia weak, greyish, consisting of zic-zac strikes between veins; discal spot small but distinct, silver-white, point-like or of semilunar form. Hindwings with rounded external edge, coloured light rose-sandy without distinct pattern. Head and thorax ochreous-brown, abdomen coloured rose-sandy.

Female: Larger, expanse 48–52 mm, forewing length 28–29 mm, with the same coloration and wing pattern, but the silver-rose shine on the forewing is more conspicuous.

Male genitalia (fig. 1): Tegumen narrow without lateral processes; vinculum narrow; valvae bilobated, the upper lobe with a long curved process, the lower one conical basally and stiletto-shaped distally; distal processes of vinculum present as a broad plate with two caudal curved stiletto-shaped processes. Aedeagus relatively long with latero-ventral (left) opening of vesica. The shape of sternum 8 is characterized by the presence of two sharpened apical thorns and a larger medial one on its caudal edge.

Preimaginal instars and biology are unknown. Moths were collected at light at altitudes from 650 to 2600 m. Probably develops one generation with flight period from July to mid September. Larva proposedly on grasses.

Differs well from all members of *Euthrix* MEIGEN by the very characteristic distal processes of the vinculum as well as by the shape of abdominal sternum 8. In external characters similar

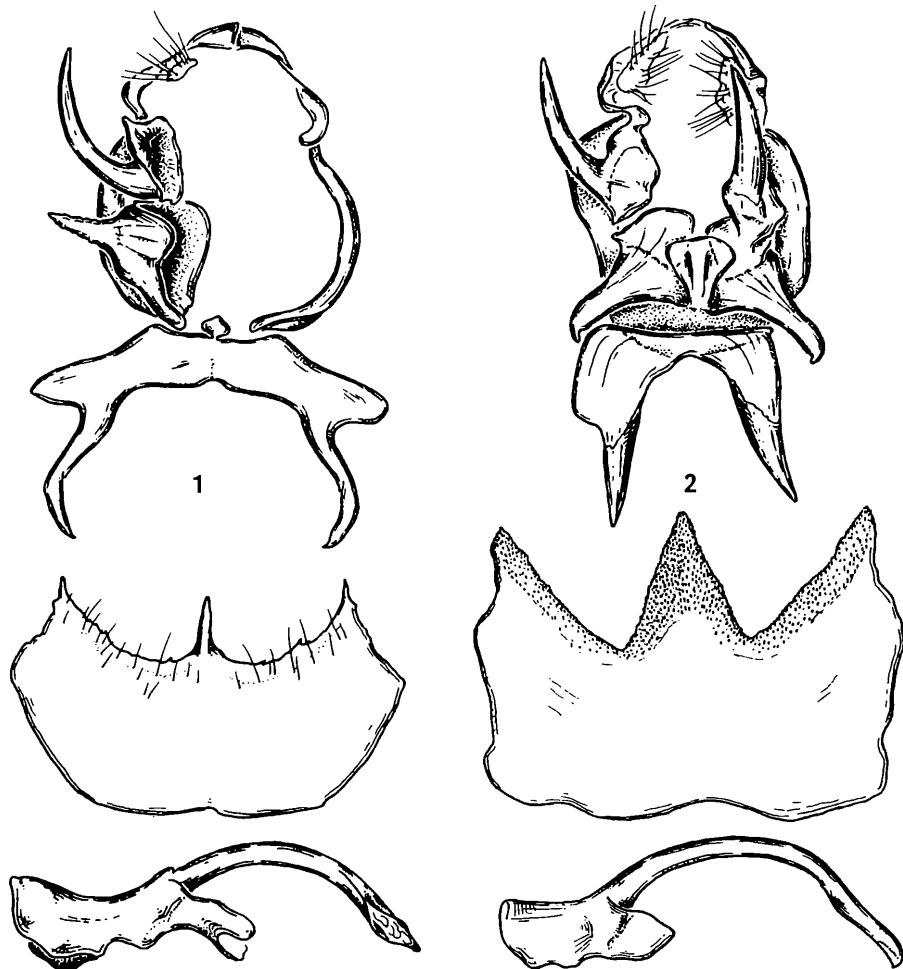


Fig. 1. Male genitalia and sternum 8 of *Euthrix vulpes* spec. nov., paratype (India, Darjeeling, GU 3888). Fig. 2. Male genitalia and sternum 8 of *Euthrix sherpai* spec. nov., holotype (GU 5127).

only to south-chinese *Euthrix hani* (DE LAJONQUIÈRE, 1978) and *Euthrix tsini* (DE LAJONQUIÈRE, 1978). The female of the new species has been designated as allotype of *Odonestis* (now *Lenodora*) *castanea* HAMPTON, 1982 (in coll. BMNH), therefore this remarkable species has been overlooked by further investigators. From *Lenodora castanea* differs by much larger size, concave postmedial fascia and especially by genitalic characters.

Distribution: northern India, Nepal.

Ethymology: by their coloration, the new species resembles in somewhat a fox (*vulpes*).

Euthrix sherpai spec. nov.

(colour plate XXII, figs 3, 4)

Holotype ♂: Thailand, Changwat Chiang Mai, 6 km SE of Pang Faen, 1100 m, 29.XI.1998, leg. T. Csovári & L. Mikus (GU 5127 – MWM).

Paratypes: 1 ♂, the same data (MWM); 1 ♂, 1 ♀, Thailand, Changwat Chiang Mai, 4 km SE of Pang Faen, 1100 m, 14.XI.1999, leg. M. HREBLAY (MWM); 2 ♂♂, Thailand, Changwat Chiang Mai, 12 km NW of Chiang Dao, 750 m, 12.XI.1998, leg. T. Csovári & L. Mikus (GU 5121, 5124 – MWM); 2 ♂♂, Thailand, Changwat Chiang Mai, 20 km NW of Mae Ai, 1650 m, 7.I.1999, leg. A. SZABO & Z. CZERE (GU 5118 – MWM); 1 ♂, the same data, 26.I.1999 (MWM); 6 ♂♂, the same data, 6.–16.XII.1998, leg. M. HREBLAY, Y. SHERPA & I. Soðs (GU 7049 – MWM); 2 ♂♂, Thailand, Chandwat Nan, 5 km N of Bo Luang, 1000–1050 m, 18.–19.VIII.1999, leg. T. Csovári & L. Mikus (GU 7048 – MWM); 1 ♂, Thailand, Changwat Phayao, 15 km SE of Chiang Muan, 640 m, 12.VIII.1999, leg. T. Csovári & L. Mikus (MWM); 1 ♂, Laos, Luang Prabang, VII.1996 (CMSW – GU STR 2001–11).

Male: species from small to medium size; expanse 29–41 mm, forewing length 16–22 mm, with light chestnut ground colour of the wings; forewings with a straight, diagonal, dark grey postmedial line and a slightly concave antemedial; external line reduced and only in some specimens present as a weak and indistinct, grey zic-zac line. Discal spot small, triangular, dark grey, pointed with white central scales. Hindwings lighter, with yellowish outer margin and darkened medial field; in some specimens two dark grey, vague fasciae can be observed. Body of chestnut colour.

Female: larger, expanse 47 mm, forewings length 27 mm, with the same characters of pattern and coloration as the male.

Male genitalia (fig. 2): tegumen and vinculum narrow, band-shaped; valvae bilobate, the upper lobe with a slightly curved process, the lower one with a relatively short, broad, conical, sharpe process; distal processes of vinculum present as a fork-shaped plate with broad and straight lateral processes. Aedeagus relatively long, curved, with ventral opening of vesica. Sternum 8 of a very characteristic form of a trident.

Female genitalia: not studied.

Preimaginal instars and biology are unknown. Flight period from August to mid Januar, probably in two overlapping generations.

In external characters very similar to the members of the *tsini* LAJ.-*tangi* LAJ.-species group; clearly characterized by the peculiarities of the male genitalia, especially of the unusual shape of sternum 8, unknown in any other *Euthrix* species.

Distribution: northern Thailand and Laos.

Ethymology: the species is named after one of the collectors, Y. SHERPA.

Euthrix fossa mariae subspec. nov.

(colour plate XXII, figs 5, 6)

Holotype ♂: Thailand, Changwat Chiang Mai, Mt. Doi Phahompok, 16 km NW of Fang, 2050 m, 6.XI.1999, leg. M. HREBLAY (GU 7050 – MWM).

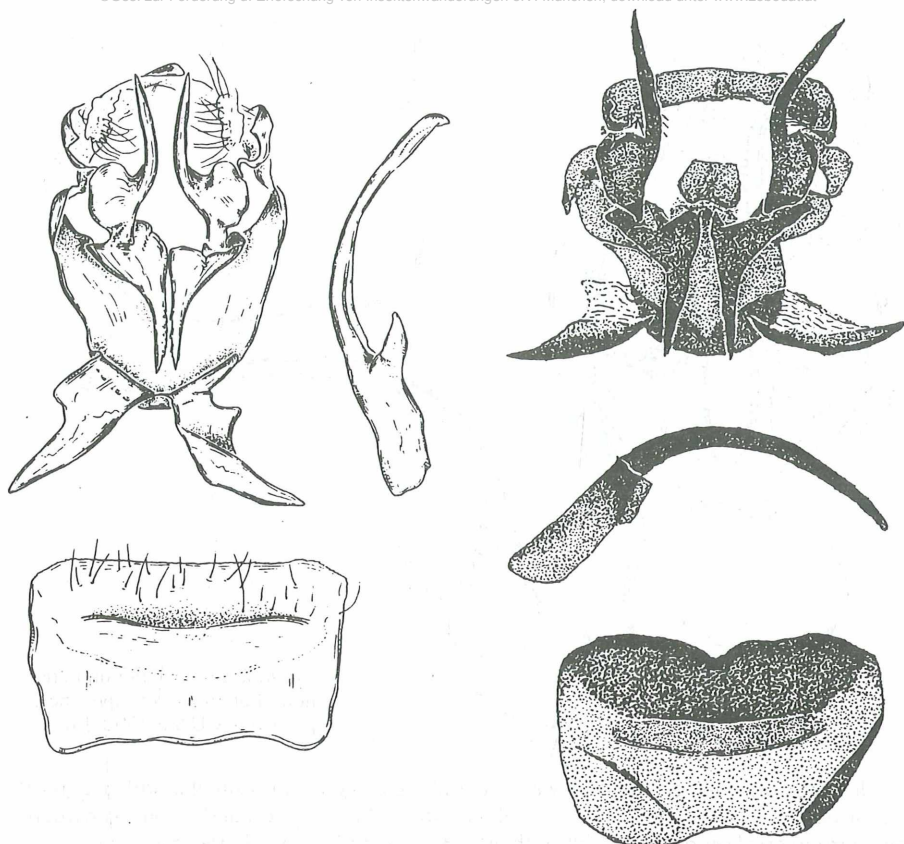


Fig. 3. Male genitalia and sternum 8 of *Euthrix fossa mariae* subspec. nov., male holotype (left – GU 7050) in comparison with the nominate subspecies from India (after DE LAJONQUIÈRE, 1978).

Paratypes: 1 ♂, Thailand, Changwat Chiang Mai, Mt. Doi Phahompok, 10 km NW of Fang, 1900 m, 7.XI.1999, leg. M. HREBLAY (MWM); 2 ♂♂, Thailand, Changwat Chiang Mai, Mt. Doi Phahompok, 18 km NW of Fang, 2100 m, 5.XI.1999, leg. M. HREBLAY (MWM); 1 ♀, the same data, 8.XI.1999 (MWM); 1 ♂, the same data, 15.XI.1999 (MWM); 1 ♂, Thailand, Changwat Nan, 25 km N of Bo Luang, 1150 m, 11.XI.1999, leg. M. HREBLAY (MWM); 1 ♂, Thailand, Changwat Chiang Mai, 12 km NW of Chiang Dao, 750 m, 12.XI.1998, leg. T. CSOVÁRI & L. MIKUS (GU 5109 – MWM).

Male: A large-sized subspecies, wing expanse 35–43 mm, forewing length 21–23 mm, with yellowish-grey groundcolour; forewings with a straight diagonal, dark brown postmedial line and a curved crenulated dark grey antemedial; external line weak, of zic-zac shape, grey. Discal

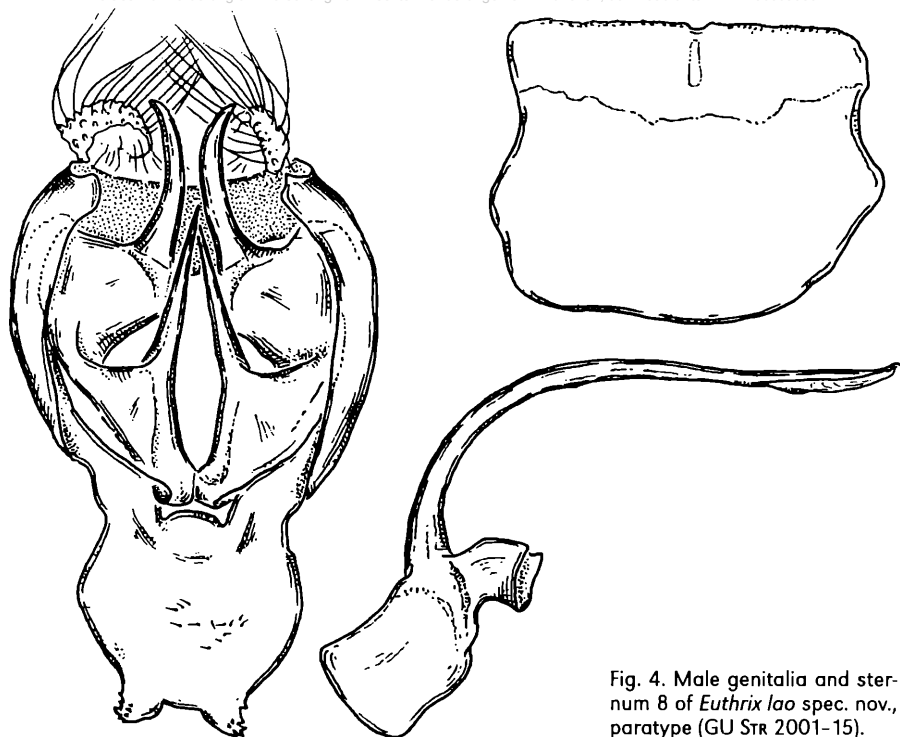


Fig. 4. Male genitalia and sternum 8 of *Euthrix lao* spec. nov., paratype (GU STR 2001-15).

spot distinct, dark grey, pointed with white central scales; sometimes small a dark grey point present above; cilia dark reddish-brown. Hindwings of the same ground colour with vague greyish transversal shadow; cilia yellowish-grey. Body of dark yellowish-grey coloration.

Female: Larger, expanse 51.5 mm, forewing length 32 mm, with the same characters but discal spot almost absent and pattern of the hindwing much more prominent.

Male genitalia (fig. 3): tegumen and vinculum narrow, band-shaped; valvae bilobate, the upper lobe with a curved process, the lower one conical, sharpened to their tops; distal processes of vinculum present as broad conical, straight processes. Aedeagus relatively long, curved, with ventral opening of vesica. Sternum 8 as a tetragonal plate without processes or appendages. Female genitalia: not studied.

Preimaginal stages and biology are unknown. The species develops probably only one generation with a flight period in November at altitudes from 750 to 2100 m.

Differs from the nominate subspecies (which is known only in few specimens from its type locality – India, Jaintia Hills) by wing ground colour (yellowish in *fossa fossa* SWINHOE, 1897) and by the shape of sternum 8 (as illustrated – fig. 3). In external characters, the species is similar to the members of the *tsini* LAJ.-*tangi* LAJ. species group but differs well from other *Euthrix* by the diagonal pattern on the forewing, lighter coloration and genitalia peculiarities, especially in the shape of sternum 8 in ♂♂. From the closely related *T. tangi* LAJ. it differs also by the

longer upper lobe of the valva, their upper lobes being of another shape, longer and less curved aedeagus and broader sternum 8; it is also much more lighter and slightly larger.

Distribution: Northern Thailand. So far only known from the type locality.

Ethymology: the subspecies is dedicated to my aunt MARIA, who supported and helped me in many ways.

Euthrix lao spec. nov.
(colour plate XXII, fig. 7)

Holotype ♂: Laos, Luang Prabang, VII.1996 (CMSW).

Paratype: 1 ♂, the same data (CMSW – GU STR 2001–11).

Male: A species of small to medium size; expanse 34–37 mm, forewing length 17–18 mm. In external characters it cannot be distinguished from other members of the *improvisa* LAJ.-*imitatrix* LAJ.-species group; clearly characterized by the peculiarities of the male genitalia, especially by the unusual shape of sternum 8 as figured (fig. 4). All other features of the male genitalia are similar to those of *E. imitatrix* LAJ.

Preimaginal instars and biology are unknown. Flight period is July.

Distribution: So far known only from Laos.

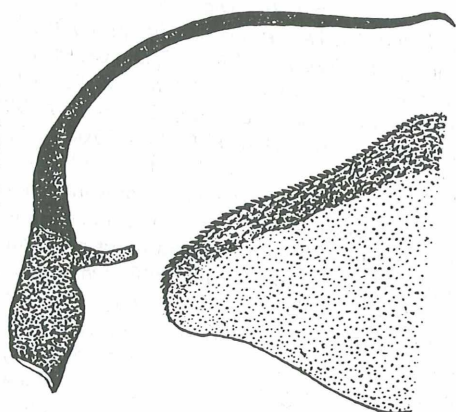
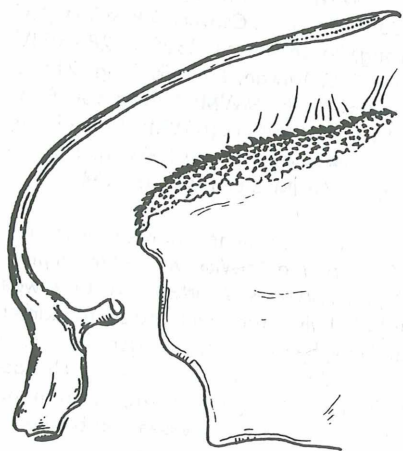
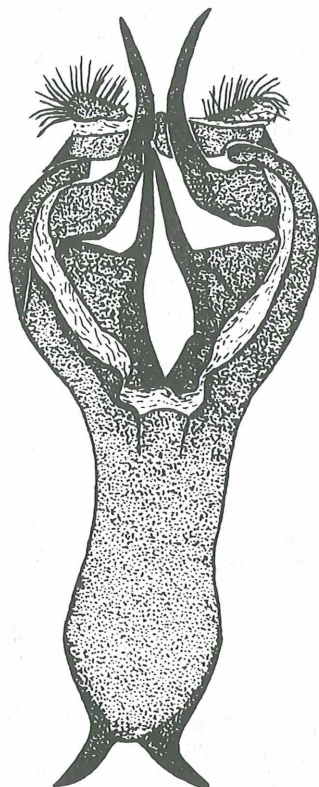
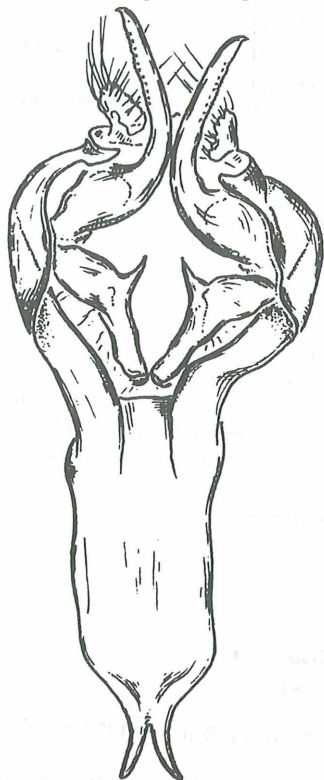
Ethymology: The species is toponymically named.

Euthrix orboy occasialis subspec. nov.
(colour plate XXII, fig. 8)

Holotype ♂, Taiwan, Prov. Hualien, Taroko N.P. on the road 8, 1400 m, 2.IV.1997, leg. CSORBA & RONKAY (GU 7041 – MWM).

Paratypes: 5 ♂♂, the same data, 2.IV.1997 (GU 7046 – MWM); 1 ♂, Taiwan, Prov. Kaoshiung, 26 km SE of Taoyuan, 30.III.1996, 1370 m, 120°52'E, 23°17'N, leg. T. CSOVÁRI & P. STÉGER (GU 7045 – MWM); 1 ♂, Taiwan, Prov. Tai-Tung, Hsiangyang, Police station, 2320 m, 28.–30.IV.1987, leg. Gy. FÁBIAN & S. KOVÁCS (GU 7040 – MWM); 1 ♂, Taiwan, Prov. Tai-Tung, 2 km E Hsiangyang, 2200 m, 15.V.1997, leg. Gy. M. & G. LÁSZLÓ (GU 5101 – MWM); 1 ♂, Taiwan, Prov. Tai-Tung, 2 km N Liyusan, 1760 m, 23.X.1996, leg. Gy. FÁBIAN & F. NEMES (MWM); 1 ♂, Taiwan, Prov. Tai-Tung, 2 km S Liyusan, 1760 m, 21.X.1996, leg. Gy. FÁBIAN & F. NEMES (MWM); 1 ♂, Taiwan, Prov. Chiayi, 4 km NE Alishan, 2200 m, 12.V.1997, leg. Gy. M. & G. LÁSZLÓ (MWM).

Male: Wing expanse 40–43 mm, forewing length 21–23 mm; very similar in appearance to the nominate subspecies from South China as well as to *E. ochreipuncta* WILEMAN and often present in collections among the latter (as a matter of fact, the taiwanese *E. orboy* ZOLOTUHN was discovered occasionally among *E. ochreipuncta* WIL.). Slightly larger, with indistinctly darker ground colour; discal spot less prominent and foretibial epiphysis slightly stronger but as far I cannot separate with certainty both species from one another only on their external characters. Precise determination is confirmed only by analysis of the male genitalia (fig. 5). From the nominate subspecies it differs clearly by the much shorter saccular processes and by the almost parallel, smaller caudal appendages on the distal process of the vinculum.



The species is new for the fauna of Taiwan.

Nothing is known about its biology; probably all information dealing with the life cycles of *E. ochreipuncta* WIL. should be attributed to the species discussed. Seems to be widely distributed on Taiwan at altitudes from 1300 to 2000 m. Probably develops two generations with flight periods end of March to May and October, but much more probably the second generation is occasional.

Ethymology: As was pointed above, this interesting finding has been made occasionally among samples of *Euthrix ochreipuncta* WIL.

Euthrix imitatrix sabon subspec. nov.

Holotype ♂: Myanmar (Burma), 25 km E Putao, env. Nan Sa Bon vill., 800 m, 6.–9.V.1998, leg. MURZIN & SINJAEV (GU 7051 – MWM).

Paratypes: 4 ♂♂, the same data (MWM); 5 ♂♂, Myanmar (Burma), 50 km E Putao, env. Nan Thi vill., 950 m, 11.–16.V.1998, leg. MURZIN & SINJAEV (MWM); 2 ♂♂, 1 ♀, Myanmar (Burma), 21 km E Putao, env. Nan Sa Bon vill., 550 m, 1.–5.V.1998, leg. MURZIN & SINJAEV (GU 6477 – MWM); 1 ♂, Myanmar (Burma), 66 km NE Putao, Zi Yar Dam vill., 1250 m, 18.–21.V.1998, leg. MURZIN & SINJAEV (MWM).

Male: A large subspecies, expanse wing 34–43 mm, forewing length 19–23 mm, with external characters as in other subspecies: dark chest-nut with dark grey medias pointed with bluish or silver-white scales, vague zic-zac external line and silky shining rosy or violett anal part of external field; discal spot vague, divided by dark yellow strokes and point above it.

Female: Larger, wing expanse 62 mm, forewing length 33 mm, with the same characters of pattern and coloration as the male, but discal spot is prominent as a large golden-yellow spot and point above it.

Male genitalia (fig. 6a, b): Differs from those of the nominate subspecies by different shape of the distal processes of the vinculum (in the new subspecies they are flattened and toothed) and especially by the principally other shape of sternum 8 (as figured). Aedeagus with tubular base and long thin distal part.

Female genitalia: not studied.

Preimaginal instars and biology are unknown. All moths were collected in April at lower altitudes (550–950 m).

In external characters it is very similar to other members of the *imitatrix* LAJ.-*improvisa* LAJ.-*ochreipuncta* WIL.-*orboy* ZOLT. species group; clearly characterized only by the peculiarities of the male genitalia, especially by the remarkable shape of sternum 8. Probably not conspecific with *E. imitatrix* and forming a separate species (with subspecies *thrix* ЗОЛОТУНИН, see below); more comparative material is necessary to define its taxonomic status more precisely. The largest subspecies of *imitatrix* LAJ.

Distribution: So far it is known only from Burma.

Ethymology: The name refers to the type locality – the village Nan Sa Bon.

Fig. 5. Male genitalia and sternum 8 of *Euthrix orboy occasialis* subspec. nov., male paratype (left – GU 7045) in comparison with the nominate subspecies from China (after DE LAJONQUIÈRE, 1978 as for *Philudoria diversifasciata* GAEDE).

Euthrix imitatrix thrix subsp. nov.

Holotype ♂: China, Yunnan Prov., Nuijiang Lisu and Dulong auton. pref., Fugong county, Lishidi (= Walo), 42 km N of Fugong, 1390 m, 27°15'N, 98°55'E, 12.–16.V.1999, leg. Dr. R. BRECHLIN (GU 7044 – MWM).

Paratypes: 1 ♂, the same data (GU 6474 – MWM); 2 ♂♂, China, prov. Yunnan, Lan Cang, 130 km SW Kunming, 1430 m, 25.XI.–5.XII.1998, ex coll. Dr. R. BRECHLIN (GU 6475, 6476 – MWM).

Male: The smallest subspecies, wing expanse 25–34 mm, forewing length 15–18.5 mm. In external characters identical with other subspecies of *imitatrix* LAJ.

Male genitalia is characterized by the shape of the distal processes of the vinculum (these are flattened, toothed and covered by small thorns) and of sternum 8 (as figured – fig. 6c–e). Aedeagus with tubular base and long, thin distal part.

Female, preimaginal stages and biology are unknown. Males were collected at light. Presumably develops two generations (May and November–December) at altitudes from 1390 to 1430 m.

As was pointed out above under *E. imitatrix sabon*, more material is necessary to define this taxon's status more precisely; probably it is not conspecific with *E. i. imitatrix* LAJ. and *E. i. tonkiensis* LAJ.

Distribution: So far known only from Southern China (Yunnan).

Ethymology: The name originates from the generic name *Eu-thrix*.

Lenodora oculata spec. nov.

(colour plate XXII, figs 9, 10)

Holotype ♂: China, prov. Yunnan, Dali Bai autonom. Pref., Yunlong country, 13 km N of Caojian, Fengshuining Mts, 25°46'N, 99°06'E, 2460 m, 10.–20.V.1999, leg. Dr. R. BRECHLIN (MWM).

Paratypes: 5 ♂♂, the same data (MWM); 15 ♂♂, the same data, 20.V.–9.VI.1999 (GU 6451 – MWM); 1 ♂, the same data, 10.–23.VI.1999 (MWM); 2 ♂♂, the same data, 25.VII.–8.VIII.1999, leg. R. BRECHLIN's local collector (GU 6456 – MWM); 1 ♂, Vietnam (N), Mts Fan-si-pan, W-side, Chapa, 22°20'N, 103°40'E, 1600–1800 m, Apr. 1994, leg. SINJAEV & loc. coll. (MWM); 1 ♂, Burma, Dawna, IV.1996 (CMSW).

Male: Wing expanse 27–33 mm, forewing length 16–19 mm. Forewings of a dark yellow-brown ground colour; postmedial fascia present as thin, dark brown line, which is slightly curved and outlined outside with lighter scales; external fasciae indistinct, as a vague row of grey zig-zag spots. Discal spot small but distinct, bright white and pointed with dark grey scales. Hindwings dark grey with dark yellow-brown cilia. Body also dark yellow-brown.

Female larger, expanse 40 mm, forewing length 23 mm, with the same but more vague pattern and somewhat lighter than the male. Discal spot less prominent.

Male genitalia (fig. 7): As illustrated, of typical shape of the genus. Aedeagus long, stilett-shaped with dorsal opening of vesica; vesica without cornuti.

Preimaginal stages and biology are unknown. The species flies at altitudes from 1600–2460 m from April to August, perhaps in some overlapping generations.

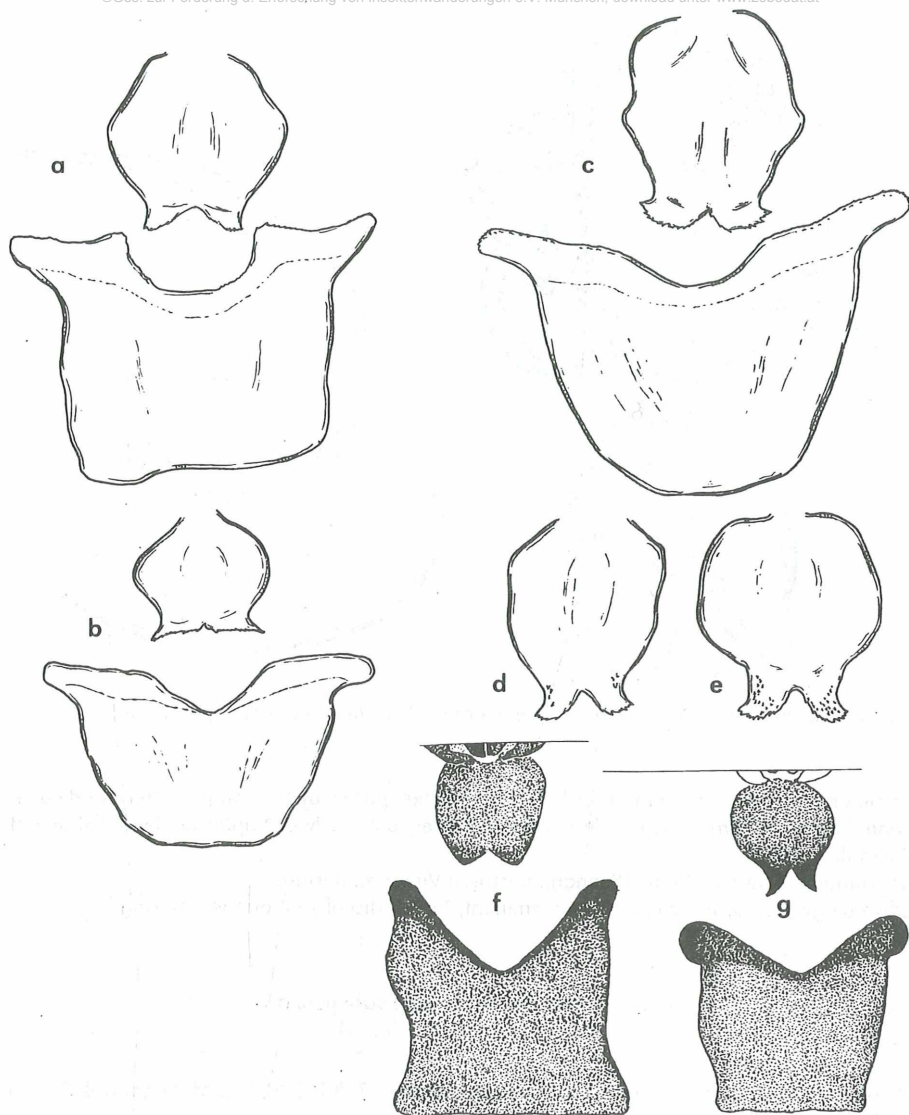


Fig. 6. Distal processes of vinculum and sternum 8 of *Euthrix imitatrix* LAJ.: a - *sabon* subsp. nov. (Burma, holotype, GU 7051), b - the same (paratype, GU 6477); c - *sabon* subsp. nov. (holotype, GU 7044); d - the same, without sternum (paratype, GU 6475); e - the same (paratype, GU 6476); f - subsp. *imitatrix* LAJ. (holotype, Kuatung); e - subsp. *tonkinensis* LAJ. (paratype). Figs f & e after DE LAJONQUIÈRE, 1978.

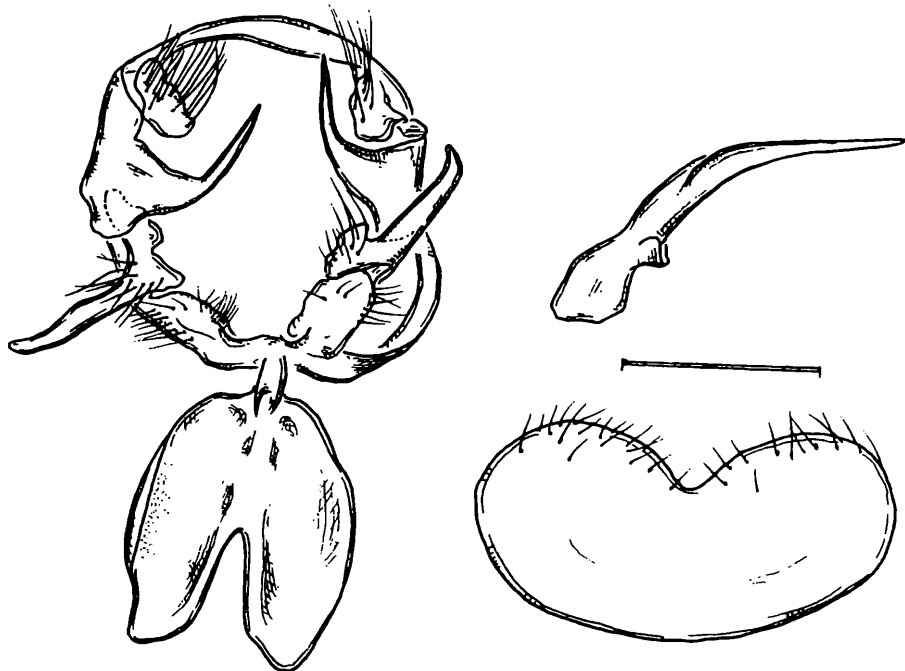


Fig. 7. Male genitalia and sternum 8 of *Lenodora oculata* spec. nov., paratype (GU 6456).

Comments: Differs well from other *Lenodora* MOORE-species by the wings' pattern and coloration. Similar to some small *Euthrix* MEIGEN-species, but easily distinguished by the shape of the male genitalia.

Distribution: Southern China (Yunnan), northern Vietnam, Burma.

Ethymology: The name refers to the prominent, "eyed" discal spot on the forewing.

Cosmotriche discincta szini subsp. nov.
(colour plate XXII, fig. 11)

Holotype ♂: West Nepal, 10 km N of Surkhet, 2000 m, 7.VIII.1996, leg. M. HREBLAY & B. SZIN (GU 5116 - MWM).

Paratypes: 4 ♂♂, the same data.

Male: Wing expanse 31–33 mm, forewing length 16.5–18 mm. Very similar in appearance to the nominate subspecies from Taiwan (colour plate XXX, fig. 12); the peculiarities of the male genitalia are diagnostic (fig. 8): the lateral processes of the vinculum broader and stronger;

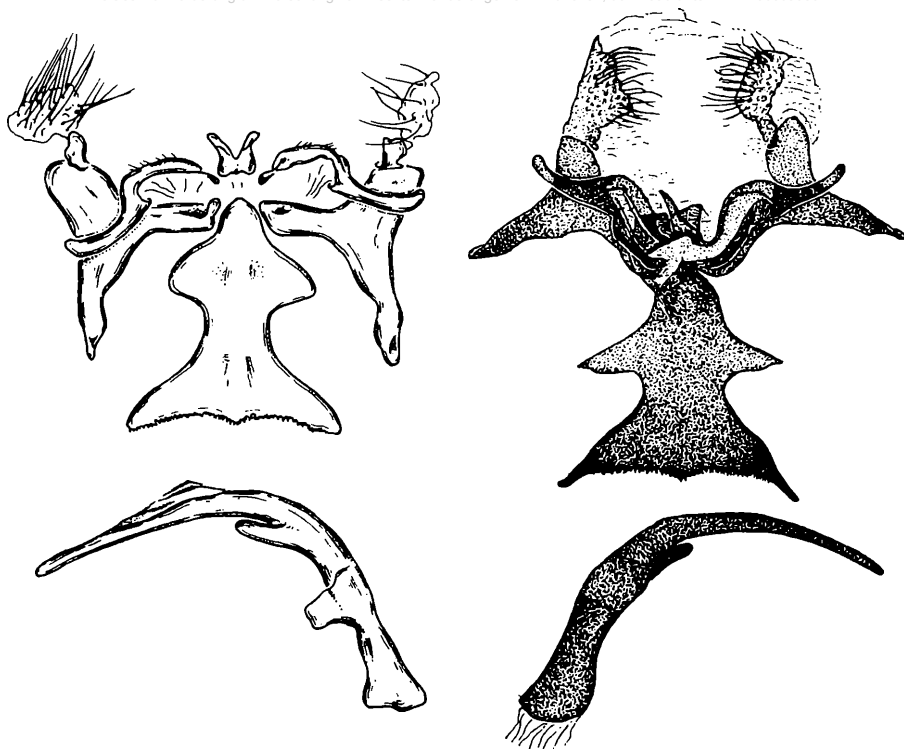


Fig. 8. Male genitalia of *Cosmotriche discincta szini* subsp. nov., Nepal, holotype (left – GU 5116) in comparison with the nominate subspecies from Taiwan (after de LAJONQUIÈRE, 1974).

the lateral projections of the cubile smaller and the caudal edges of the cubile not stretched into sharpened tips.

Female, preimaginal stages and biology are unknown. A high mountain species (was collected at an altitude of 2000 m), develops probably one generation.

Distribution: So far it is known only from Nepal. The species is noted here for the first time continental Asia.

Ethymology: The subspecies is named after the collector B. SZIN.

Somadasys saturatus spec. nov.
(colour plate XXII, fig. 13)

Somadasys kibunensis MATSUMURA sensu Hou, 1983, Iconographia Heterocerorum Sinicorum 4: 426, pl. 145, fig. 3052.

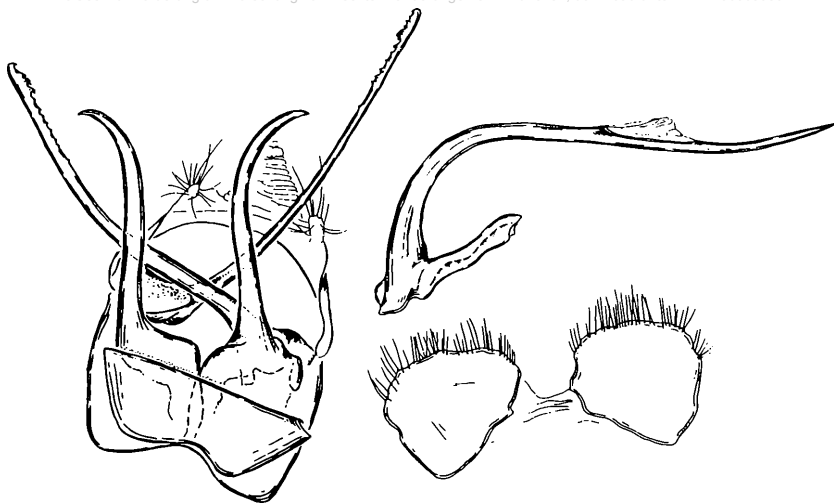


Fig. 9. Male genitalia and sternum 8 of *Somadasys saturatus* spec. nov., male paratype, Ta-Tsien-Lou (coll. BMNH).

Holotype ♂: Chasseurs Indigènes des Missionnaires de Ta-tsien-Loû, 1906. The specimen is provided with the following additional labels: "*Dasysoma brevivensis* X subspec. nov., W. H. T. TAMS det.", "*kibunensis* MATS. det GAEDE", "*Eriogaster argentomaculata* BARTEL. Syn?" (BMNH). Paratypes: 1 ♂, Chasseurs Indigènes des Missionnaires de Ta-tsien-Loû, 1906 (genital slide BMNH-LASIO 1222); 1 ♂, China, prov. Yunnan, Dali Bai autonom. Pref., Yunlong, 13 km N of Caojian, Fengshuining Mts, 25°46'N, 99°06'E, 2460 m, 10.-20.V.1999, leg. Dr. R. BRECHLIN (MWM); 1 ♂, the same data, 20.V.-9.VI.1999 (GU 6451 - MWM); 2 ♂♂, the same data, 10.-23.VI.1999 (MWM); 1 ♂, China, prov. Yunnan, Nuijiang Lisi & Dulong Aut. Pref., 42 km N of Fugong, 27°15'N, 98°55'E, 1390 m, 6.-8.VI.1999, leg. Dr. R. BRECHLIN (MWM); 1 ♂, China, Sichuan, Daxue Shan Mts, 80 km W Mianning, 28°34'N, 102°00'E, 2750 m, 7.-8.VII.1999, leg. SINJAEV & PLUTENKO (MWM).

Male: Wing expanse 32–34 mm, forewing length 16.5–18 mm. Forewings almost triangular, of dark orange ground colour; external and both medial fasciae present as brownish transversal lines; external field of light brownish-orange coloration, the field between externa and post-media is densely covered with light violet-rosy scales. Discal spot relatively narrow and small but distinct, of semilunar form, covered by silver scales and outlined by blackish scales. Hindwings with rounded external margin, light rosy-orange with vague transversal brownish-violet band. Body with dark orange cover.

Male genitalia (fig. 9): tegumen narrow; socii chitinized, prominent, conical; vinculum broad; valva with two very long lobes: the lower one is flattened from the side and bears some curved teeth on the dorsal edge at the apex, the upper one stilett-shaped, conical; distal processes of the vinculum as a tetragonal plate with a short medio-caudal tooth. Aedeagus very long, tubular with elongated apical sput and dorsal opening of vesica; vesica without cornuti.

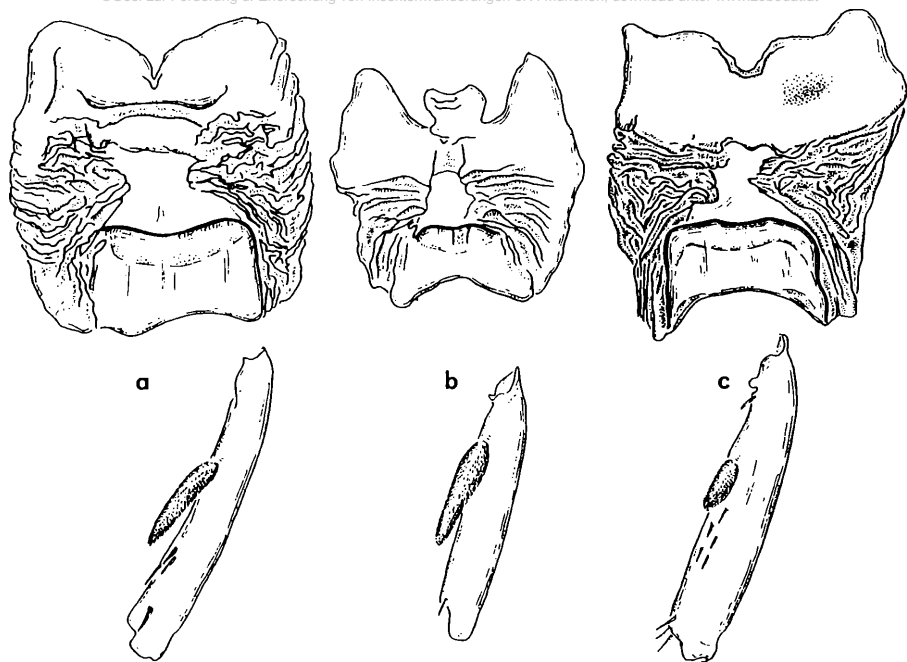


Fig. 10. Vaginal plates of ♀♀ and their foreleg tibiae showing epyphysis in different *Syrastrenopsis* species: a – *S. moltrechti* GRÜNBE. (Russian Far East); b – *S. kawabei* KISHIDA (Taiwan); c – *S. imperiatus* spec. nov. (holotype).

Female, preimaginal stages and biology are unknown. The species flies at altitudes of 1390–2750 m in May and June.

Comments. Similar in coloration to *S. catacoides* STRAND from Taiwan but discal spots very small, the smallest ones in all *Somadasy*s, of semilunar form. Forewings more elongated, their tips weakly stretched. Male genitalia are characteristic, with very long valvae and aedeagus. Distribution: Southern China (Sichuan, Yunnan).

Ethymology: The name is derived from “Saturn” in the sense “bellicose” – the valva and the aedeagus of the new species resemble some kind of ancient weapons.

***Syrastrenopsis imperiatus* spec. nov.**
(colour plate XXII, fig. 14)

Holotype ♀: A-tun-tse (Nord-Yünnan), obere Höhe ca. 4500 m, 20.VIII.1937, H. HÖNE (BMNH).

Female: Wing expanse 43 mm, forewing length 22 mm. Forewings reddish brown, medias dark grey, not bordered interiorly by whitish scales; external fascia light greyish. Hindwings with external zone slightly darker.

Female genitalia (fig. 10c). Papillae analis short, densely covered by short setae; antevaginal plate strong, broad, almost rectangular with indistinct, rounded, caudal cut; postvaginal plate with obvious caudal cut and numerous lateral wrinkles. Ostium broad, membranous, antrum and ductus bursae reduced, corpus bursae bag-shaped, short, membranous, without signa. Male, praemaginal stages and biology are unknown. Supposedly univoltine, at higher altitude (about 4500 m) the flight period is mid August.

Comments. The largest species of *Syrastrenopsis* GRÜNB. with contrasting coloration. Female genitalia construction is characteristic.

Distribution: Known only from the type-locality (southern China: Yunnan).

Etymology: The name is derived from "imperator" or "imperial"

Syrastrenopsis inthanonensis ORHANT, 2001

(colour plate XXII, figs 15, 16)

Syrastrenopsis inthanonensis ORHANT, 2001, Bull. Soc. ent. Mulhouse **57** (1): 6, figs 1, 2. Locus typicus: Thailand, Doi Inthanon, Chiang Mai. Holotype: ♂ (coll. G. ORHANT).

This interesting species was described some months ago and figured in very bad quality (ORHANT, 2001). Below, a re-description of the species is given.

Male: Wing expanse 33–36 mm, forewing length 18–20 mm. Forewings rosy-brown; external field covered with greyish scales. Both medial fasciae present as dark brown, distinct, almost parallel slightly concave diagonal lines, pointed inside by rose-cream scales; external fasciae present as a vague grey band, also pointed inside by rose-cream scales. External edge rose-cream; cilia grey-brown. Discal spot very vague, dark brownish-grey; invisible in some specimens. Hindwings of the same ground colour, with two vague brownish-grey transversal bands in medial zone. Wings covered only lightly, therefore wings look like semitransparent with strong irriduous shining. Body of brownish-cream colour, darker dorsally; thorax with blackish-brown dorsal line. Foretibia with elongated epyphysis (as long as one third of tibial length).

Male genitalia (fig. 11): Tegumen narrow; socii small, membranous; vinculum broad, with distinct saccus; valva with curved conical lower lobe and flattened semilunar lower lobe. Aedeagus short tubular with curved apical spur; vesica with two zones of point-like scobination.

Female: larger, expanse 47 mm, forewing length 25 mm, with the same coloration and wings pattern as the male; in the hindwing the external field distinctly darker and both transversal fascia more prominent. Foretibia with elongated, relatively short epyphysis, slightly shorter than in the males.

Female genitalia: Could not be studied because they were destroyed by a pest.

Praemaginal instars and biology are unknown. All moths were collected at light on an altitude of 2050–2370 m in the period from November to mid December.

Comments. Because of the semitransparent wings, irriduous shining and light coloration it cannot be confused with other members of the genus; the relatively short epyphysis is also typical. In genitalia, the species is characterized by the semilunar upper lobe of the valva in the males.

Distribution: So far known only from northern Thailand.

Material examined: 4 ♂♂, Thailand, Changwat Chiang Mai, Mt. Doi Inthanon, N.P., 43.5 km N of Chom Thong, 2050 m, lower mountain forest, 15.–21.XI 1998, leg. Dr. R. BRECHLIN (MWM);

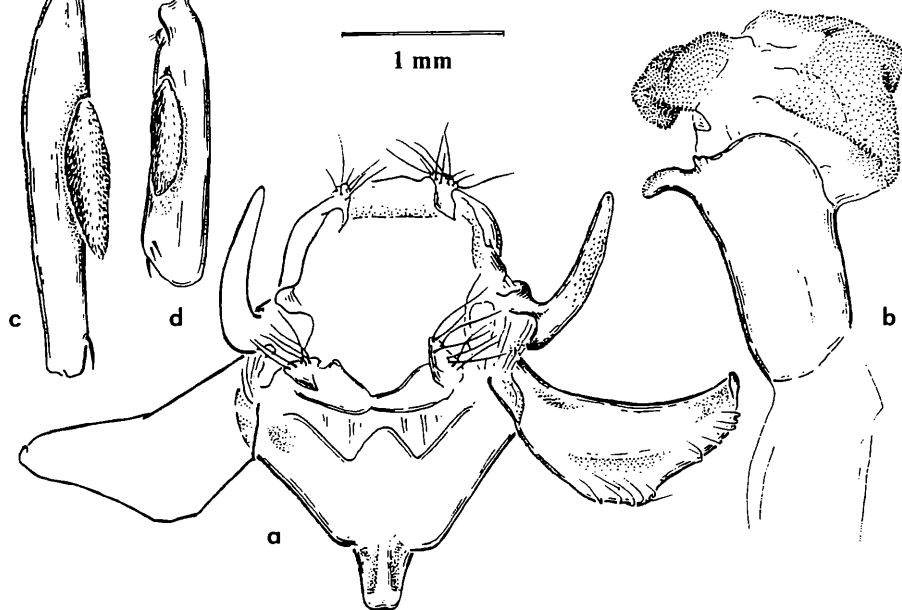


Fig. 11. *Syrastrenopsis inthanonensis* ORHANT, 2001. a – male genitalia in ventral view; b – aedeagus; c – foretibia of a male; d – foretibia of a female.

1 ♂, the same data, 45.5 km N of Chom Thong, 2370 m, 19.–20.XI.1998 (MWM); 1 ♂, the same data, 37.3 km N of Chong Thong, 1730 m, 28.–31.XI.1998 (MWM); 2 ♂♂, Thailand, Changwat Chiang Mai, Mt. Doi Phahompok, 18 km NW of Fang, 2100 m, 7.XII.1998, leg. M. HREBLAY, Y. SHERPA & I. Soðs (GU 5110 – MWM); 1 ♀, Thailand, Changwat Chiang Mai, Mt. Doi Phahompok, 10 km NW of Fang, 1900 m, 7.XI.1999, leg. M. HREBLAY (GU 7052 – MWM).

Synonymic appendix

Euthrix MEIGEN, 1830, Syst. Beschreibung eur. Schmett. 2 (4): 191.

Type-species: *Phalaena potatoria* LINNAEUS, 1758, Syst. Nat. (Ed. 10) 1: 498, by subsequent designation by GROTE, 1898, Illte Z. Ent. 3: 71.

Locus typicus: Southern Europa.

Routledgia TUTT, 1902, Nat. Hist. Br. Lepid. 3: 153.

Type-species: *Amydona laeta* WALKER, 1855, List Specimens lepid. Insects Colln Br. Mus. 6: 1416, by original designation.

Locus typicus: [Bangladesh] Sylhet.

Orientrix TSHISTJAKOV, 1998, Far East. entomol. **66**: 2, **syn. nov.**

Type-species: *Amydona laeta* WALKER, 1855, by original designation.

A junior objective synonym of *Routlegdia* TUTT, 1902 and a subjective synonym of *Euthrix* MEIGEN, 1830.

All characters pointed out by Yu. A. TSHISTJAKOV (1998: 2–4) as unique for his new genus (e. g. shape of palpus labiales, length of epyphysis, shape of sternum 8 in ♂♂ or divided valva) are so only in comparison with the generotypus *Phalaena potatoria* L., 1758, but are widely distributed among species of the oriental and south palaearctic group with all intermediate stages. Therefore, the erection of a new genus for this group is not necessary. On the other hand, all taxa of subspecific level discussed by Y. DE LAJONQUIÈRE (1987) under the specific name *laeta* Wlk. (*sulphurea* AURIVILLIUS, 1879, *divisa* MOORE, 1879 and *austrina* LAJ., 1978) which had been raised to species level by TSHISTJAKOV (1998) should not been considered as separate species because of the extreme similarity both in external and genitalic characters. But I have to note that the population of Sundaland (ssp. *austrina* LAJ., 1978 in his sense) is a heterogeneous group consisting of at least two different subspecies, one of them (from Java) with distinctly serrate valvae is still undescribed.

Acknowledgements

I would like to express my sincere thanks to Mr. THOMAS J. WITT (Munich) for support; Mr. DAVID GOODGER (London) and Dr. DIETER STÜNING (Bonn) for the help in the work with collections; Mr. MANFRED STRÖHLE for sending some interesting specimens from his collection.

The study was supported by Deutscher Akademischer Austauschdienst (1995), Deutsche Forschungsgemeinschaft (1998) and Thomas J. Witt Stiftung (1999–2001).

References

- DE LAJONQUIÈRE, Y. (1974): Formes asiatique du Genre *Cosmotriche* HÜBNER (= *Selenephra* RAMBUR = *Selenepherides* DANIEL = *Wilemaniella* MATSUMURA) [Lep.] (17^e Contribution a l'étude des Lasiocampides). – Bull. Soc. ent. Fr. **79**: 132–146.
- DE LAJONQUIÈRE, Y. (1978): Le Genre *Philudoria* KIRBY, 1892. 25^e Contribution a l'étude des Lasiocampidae [Lepidoptera]. – Anns Soc. ent. Fr. (N.S.) **14** (3): 381–418.
- ORHANT, G. E. R. J. (2001): Une nouvelle espèce de Lasiocampidae de Thaïlande (Lepidoptera, Lasiocampidae). – Bull. Soc. ent. Mulhouse **57** (1): 6–7.
- TSHISTJAKOV, Yu. A. (1998): New data on the lappet-moths (Lepidoptera, Lasiocampidae) of the Russian Far East. – Far East. entomol. **66**: 1–8.

Explanation of colour plate XXII (p. 483):

Fig. 1. *Euthrix vulpes* spec. nov., holotype ♂.

Fig. 2. *Euthrix vulpes* spec. nov., paratype ♀.

Fig. 3. *Euthrix sherpai* spec. nov., holotype ♂.

Fig. 4. *Euthrix sherpai* spec. nov., paratype ♀.

Fig. 5. *Euthrix fossa mariae* subspec. nov., holotype ♂.

- Fig. 6. *Euthrix fossa mariae* subsp. nov., paratype ♀.
 Fig. 7. *Euthrix lao* spec. nov., holotype ♂.
 Fig. 8. *Euthrix orboy occasialis* subsp. nov., holotype ♂.
 Fig. 9. *Lenodora oculata* spec. nov., holotype ♂.
 Fig. 10. *Lenodora oculata* spec. nov., paratype ♀.
 Fig. 11. *Cosmotriche discitincta szini* subsp. nov. holotype ♂.
 Fig. 12. *Cosmotriche discitincta discitincta* WILL., Taiwan.
 Fig. 13. *Somadasys saturatus* spec. nov. holotype ♂ (BMNH).
 Fig. 14. *Syrastrenopsis imperiatus* spec. nov., holotype ♀ (BMNH).
 Fig. 15. *Syrastrenopsis inthanonensis* ORHANT, 2001, ♂.
 Fig. 16. *Syrastrenopsis inthanonensis* ORHANT, 2001, ♀.

4	8	12	16
3	7	11	15
2	6	10	14
1	5	9	13

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Colour plate XXII

ZOLOTUHIN, V. V.: Contributions to the study of Asiatic Lasiocampidae. 5. Descriptions of new species of *Euthrix* MEIGEN, 1830 and of related genera, with a synonymic note (Lepidoptera, Lasiocampidae). – *Atalanta* **32** (3/4): 453–471.

- Fig. 1. *Euthrix vulpes* spec. nov., holotype ♂.
 Fig. 2. *Euthrix vulpes* spec. nov., paratype ♀.
 Fig. 3. *Euthrix sherpai* spec. nov., holotype ♂.
 Fig. 4. *Euthrix sherpai* spec. nov., paratype ♀.
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 Fig. 14. *Syrastrenopsis imperiatus* spec. nov., holotype ♀ (BMNH).
 Fig. 15. *Syrastrenopsis inthanonensis* ORHANT, 2001, ♂.
 Fig. 16. *Syrastrenopsis inthanonensis* ORHANT, 2001, ♀.

4	8	12	16
3	7	11	15
2	6	10	14
1	5	9	13

Colour plate XXII

